

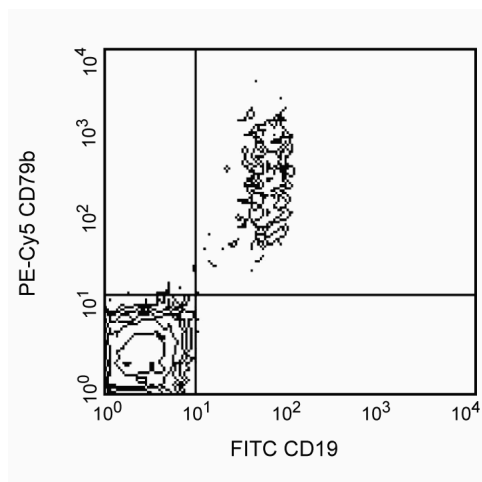
Technical Data Sheet

PE-Cy™5 Mouse Anti-Human CD79b**Product Information**

Material Number:	551063
Alternate Name:	Ig-beta; IGB; B29
Size:	100 Tests
Vol. per Test:	20 µl
Clone:	CB3-1
Immunogen:	Purified CD79αβ from Ramos B Cell Line
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VI CD79.1
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Immunoglobulin (Ig) antigen receptors are composed of a non-covalently-associated complex of Ig and two other proteins, Igα and Igβ, which have been designated in the Fifth International Leukocyte Workshop as CD79a and CD79b respectively. The CB3-1 monoclonal antibody specifically binds to CD79b, which is expressed on surface Ig (sIg)-positive lymphocytes and B-cell lines but only in the cytoplasm of sIg-negative cells including most terminal deoxynucleotidyl transferase (TdT) positive early pre-B and all cytoplasmic μ positive pre-B cell lines. Antibodies to CD79b are helpful in delineating signal transduction pathways activated via antibody receptors during different stages of B-cell differentiation.



Flow cytometric analysis of CD79b expression on human peripheral blood lymphocytes. Whole blood was stained with PE-Cy™5 Mouse Anti-Human CD79b (Cat. No. 551063) and FITC Mouse Anti-Human CD19 (Cat. No. 555412/560994). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 555899). Fluorescence contour plots were derived from gated events with the forward and side light-scattering characteristics of viable lymphocytes.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with PE-Cy5 (formerly known as BD Cy-Chrome™) under optimum conditions, and unconjugated antibody and free PE-Cy5 were removed.

Application Notes**Application**

Flow cytometry	Routinely Tested
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551063 Rev. 10



Suggested Companion Products

Catalog Number	Name	Size	Clone
555750	PE-Cy TM 5 Mouse IgG1 κ Isotype Control	100 Tests	MOPC-21
555412	FITC Mouse Anti-Human CD19	100 Tests	HIB19
560994	FITC Mouse Anti-Human CD19	25 Tests	HIB19
349202	BD FACST TM Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
6. PE-Cy5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the PE-Cy5 tandem fluorochrome, extra care must be taken when using dual-laser cytometers which may directly excite both PE and Cy5TM.
7. PE-Cy5 tandem fluorochromes have been reported to bind some classes of human macrophages and granulocytes via Fc receptors, and PE has been reported to bind to mouse B lymphocytes via Fc receptors. Preincubation of mouse leukocytes with Mouse BD Fc BlockTM purified anti-mouse CD16/CD32 mAb 2.4G2 can reduce the non-specific binding of PE-Cy5-conjugated reagents to mouse B cells. However, PE-Cy5 conjugated reagents should not be used to stain splenocytes of SJL, NOD, and MRL mice as B lymphocytes and/or other leukocytes have been reported to non-specifically stain regardless of the use of Mouse BD Fc BlockTM (the CD72c complex has been implicated for PE-Cy5 binding in these strains). Reagents conjugated to PE, PerCP, PerCP-Cy5.5, APC, and APC-Cy7 tandem fluorochrome can be used on leukocytes from these mouse strains.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
9. PE-Cy5 is a tandem fluorochrome composed of R-phycoerythrin (PE), which is excited by the 488 nm light of an Argon ion laser and serves as an energy donor, coupled to the cyanine dye Cy5, which acts as an energy acceptor and fluoresces at 670 nm. BD Biosciences Pharmingen has maximized the fluorochrome energy transfer in PE-Cy5, thus maximizing its fluorescence emission intensity, minimizing residual emission from PE, and minimizing lot-to-lot variation.
10. Cy is a trademark of GE Healthcare.
11. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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